*December 03, 2007* **EX PARTE – FILED ELECTRONICALLY**

Ms. Marlene Dortch, Esq.
Secretary - Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: New York Statewide Wireless Network Comments;

Canadian Region Wave 4 800 MHz Rebanding – FCC Docket 02-55

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Dear Ms. Dortch,

In 2007, the State of New York has commenced the deployment and acceptance process for a two billion dollar state-of-the-art public safety radiocommunications system. The Statewide Wireless Network, or SWN, has been awarded to M/A-COM, and will primarily use 700/800 MHz TDMA (and Project 25 FDMA conventional) technologies, with VHF Project 25 FDMA technology in Wilderness areas where 800 MHz cannot provide adequate coverage due to environmental restrictions. SWN is one of the largest 800 MHz public safety licensees in the entire country, and as such has an immense stake in the ongoing 800 MHz (and 700 MHz) proceedings before the FCC.

SWN is intensely affected by the 800 MHz international treaty restrictions and FCC Rules, as a large area of New York State is designated as within Canadian Border Regions 2 (within 100-km) and 7 (100 to 140-km). As one of the organizers of the recent Wave 4 Public Safety Rebanding Summit that took place in Ohio on June 7, 2007, and as an active participant in Regional Planning for Regions 30, 33, and 55, we provide the following comment on the Commission's Further Notice of Proposed Rulemaking (FNPRM), released November 1, 2007.

Having spent a great deal of time and effort studying and addressing these issues, SWN directs the Commission to the attached framework for 800 MHz rebanding in Canadian Border Regions 2, 3, and 4. This proposed approach, detailed in *Attachment 1*[1] represents the best consensus that has been obtained to date through the many roundtable discussions on this issue with public stakeholders. This proposal does not contain all complex details, but at the Wave 4 Rebanding Summit, the State had presented sufficient detail in support of the proposed approach to answer most all

[1] *Also jointly filed under Docket 02-55 by Regions 30, 33, and 55 on July 27, 2007.*

implementation questions – noted here as *Attachment 2*. This presentation (including its animations) provides what SWN feels is the best technical description of this proposed approach.

SWN understands that the process will be complicated – and is willing to meet with the Commission, and any other stakeholders to review the details of this approach. Although the two attached documents provide the bulk of SWN's response to the NPRM, the State also provides the following summary response to some of the questions posed by the NPRM.

*Applying NPSPAC Emissions Restrictions to Old Block Licensees in Region 2*

At paragraph 10 of the FNPRM, the Commission requests comment on the proposal by the Commonwealth of Pennsylvania that, because of the mixed bandwidth configuration of the Region 2 public safety allocations, all licensees utilize the more restrictive NPSPAC emissions mask. Although not clearly stated in the NPRM, SWN believes[2] that the post-rebanding Region 2 environment should contain distinct 12.5-kHz NPSPAC and 25-kHz Old Block assignments. The transmitter emission, modulation, and deployment criteria for these assignments should remain the same as they were in a pre-rebanding environment. Any changes to transmitter emission and modulation characteristics, such as emission characteristics, would adversely impact the coverage of current operations. In particular, SWN feels that it should be allowed to be able to continue to deploy using the current emissions mask for 25-kHz old block channels, as the site coverage is greater than that available using the more restrictive NPSPAC mask. For SWN, spectrum efficiency is not an issue, as the four slot TDMA technology currently deployed is two and a half times[3] more spectrally efficient than Project 25 Phase-1 systems, and already meets the full 6.25 kHz spectrum efficiency targeted for future deployments – many years ahead of the FCC's schedule. For other incumbent systems on old block channels there would also be undesirable coverage impacts from applying more restrictive emissions limitations. The current transmitter masks should remain – since with the TSB-88-based tools available today, it is an easy matter to handle frequency coordination of diverse technologies and bandwidths.

*Canadian Region 7 Below Region 2*

In the approach proposed by the Public Safety and Homeland Security Bureau (PSHSB), the Region 7 allocation immediately below Region 2 that falls within the frequency ranges of 806-809/851-854 MHz will [only] be the existing NPSPAC allocation, translated down by 15 MHz. This would place NPSPAC licensees co-channel

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[2] As does the Great Lakes Planners Group, and Regions 30, 33, and 55 – see their July 27 Ex Parte Filing, which *Attachment 1* was a part of.

[3] Using OpenSky four slot TDMA technology, a single 25-kHz RF channel can provide four traffic voice paths and an embedded control channel, the same operational functionality with a Project 2-25 Phase-1 system would require at least five 12.5-kHz channels, resulting in a two and a half fold increase in spectrum required.

to old block licensees, and severely restrict spectrum availability and deployment flexibility in the already heavily restricted border Region 2. Instead we recommend the approach shown in *Attachment 2 (Slides 19-22)*, which would avoid additional spectrum deployment constraints imposed upon Region 2 by the PSHSB approach; instead moving these constraints into Region 7, where flexibility exists to coordinate these effectively into the boundary conditions set by Region 2 and the non-border Regions. This in fact was the intent of the Great Lakes Planners as well (*Attachment 2* was presented and discussed at the Wave 4 Summit), even though the colors used in the slides filed do not make this point clear.

The approach proposed here also eliminates the "Domino Effect" that was mentioned as a concern by the Commonwealth of Pennsylvania. Upon careful examination it is seen that areas outside of the Canadian border region are unaffected by the Wave 4 Border Region Rebanding plan, and in fact will have already been rebanded to their new assignments. Public Safety licensees in Region 2 that have current old block assignments will remain on them, unless these fall at one of the five channel locations where the mutual aid channels will need to move to. Therefore the only areas that will be reassigned as part of Wave 4 Border Region Rebanding will be (with few exceptions) the NPSPAC channels in Canadian Regions 2 and 7, and NPSPAC and old block channels in Region 7 – with no domino effect into other areas. In fact, a wide area reconfiguration (i.e. "repacking", or not utilizing a piecemeal reassignment process) of the spectrum under rebanding could also offer better interference protection and/or spectrum utilization than was possible before rebanding.

*Need for a Defined Frequency Coordination Process in Mixed Band Regions*

SWN also notes that the FCC will need to address how future coordination should be handled for "old block" and NPSPAC channel assignments that are either co or adjacent channel – a condition that has never previously existed. The State suggests that the following steps be followed for such cases:

- Require frequency coordinators to obtain a concurrence letter from the Chair of any and all Regions with incumbent operations within that are either co channel (within 70 miles), or adjacent channel (within 35 miles) to a proposed operation under consideration. In lieu of RPC contact, the concurrences could be provided directly from all affected incumbent licensees.
- Require the frequency coordinators for license applications that have already obtained RPC approval to analyze and assess interference between all incumbent operations that are either co channel (within 70 miles), or adjacent channel (within 35 miles) to a proposed operation which is under consideration. In lieu of frequency coordinator review, concurrences could be provided directly from all affected incumbent licensees.

In closing, the State of New York SWN wishes to express gratitude to the FCC for working closely with SWN, the Great Lakes Planners, and all of public safety during

this long and arduous 800 MHz rebanding process. We remain committed to whatever is necessary to conclude the Wave 4 rebanding process in a safe and timely fashion.

Sincerely,

Respectfully Submitted,

Hanford Thomas

Director - Statewide Wireless Network Office

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*Cc:* *David Furth, FCC Public Safety and Homeland Security Bureau*

*Attachments:*

*(1) Comments from Great Lakes Public Safety_1_26_07 to FCC.pdf*

*(2) SWN_Wave4_Rebanding_forFiling.ppt*